

Desert Composting Recommendations

Bernalillo County Extension Master Composters

Desert environmental factors of wind, intense sun, low humidity and drought all contribute to evaporation in any composting operation. Decomposition of organic material requires about 50% moisture and adequate air flow throughout the aerobic composting process. Composting technique options are available for the desert dweller. All are directed at decreasing evaporation while managing air flow throughout the composting process. Some of these options are:

1. Use a containment system (bin) of reduced porosity so that air flow is better managed thereby decreasing evaporation. Bins constructed from hardware cloth, chicken wire or widely spaced wood slats should be lined with a plastic material or cardboard, leaving a one inch air intake space at the



Photo courtesy of Fred Hermann

- bottom of the bin. Manufactured plastic bins may come with too many holes for desert composting. Always leave the bottom holes open, but some others may be taped over to manage air flow. Experimentation may be required for best operation.
2. As we are managing (moderating) intake air flow in desert composting it is imperative that bulking materials be added regularly as the operation is built up. Bulking helps maintain spaces in the organic material so that air can penetrate throughout the operation (pile). Bulking material can be sticks, twigs, wood chips, pinecones, corncobs, straw, cornstalks and similar dense woody materials. Bulking (6–8" of material) is important as the first (bottom) addition of any composting operation. Then bulking (4–6") is added for every 6–8" of organic material that is added to the compost pile. Bulking materials decompose very slowly and so they maintain air spaces (fluff) which allows air to penetrate the layers. Bulking materials resist the compression from the the weight of added organic materials to a pile. Especially when the materials are wet.
3. Pre-soak any dry organic material before adding it to a composting operation. As an example, dry leaves (which are hydrophobic) will absorb water if soaked in a pail or wheelbarrow before adding to a compost pile. Shredding dry materials before soaking will increase water absorption.
4. Place any composting operation in maximum shade during the hot months.
5. Place a composting operation (bin) on soil. Avoid concrete or asphalt as they heat up and increase evaporation in the pile.
6. Lightly cover the top of any compost pile to decrease loss of moisture as saturated air passes upward through the pile. Covering also decreases flying insects in the area of the pile. Newspaper, plastic, cardboard, rug, tarp, straw or dry leaves may be used as a top cover.
7. Add water to any composting operation as necessary. For a cold pile churning and mixing the contents as water is added may be necessary from time to time to maintain adequate moisture (50%) throughout. Hot piles should be completely turned, mixed and moisturized as necessary. Then re-cover any pile.